

SEPA CHECKLIST

Northwest Alloys, Inc.

Addy Plantsite Mine Reclamation Plan February 2004

A. BACKGROUND

1. Name of proposed project, if applicable:

Addy Plantsite Mine Reclamation Plan (Mine Reclamation Plan)

2. Name of applicant:

Northwest Alloys, Inc.

3. Address and phone number of applicant and contact person:

Applicant: Northwest Alloys, Inc.

Contact Person: Calvin Davis

P.O. Box 115

Addy, Washington 99101-0115

4. Date checklist prepared:

December 1998, revised March 2003

5. Agency requesting checklist:

Department of Natural Resources

6. Proposed timing or schedule (including phasing, if applicable):

The mining related areas have been divided into seven segments to guide reclamation. Reclamation of all these segments is anticipated to be complete by October 2004. Some of these segments have already been reclaimed.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

There are no current plans for future mine site additions or expansion, or further activity related to or connected with the mining segments once reclaimed.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Addy Plantsite Mine Reclamation Plan (included with this checklist)

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

None

10. List any government approvals or permits that will be needed for your proposal, if known.
Mine Reclamation Plan approval – Department of Natural Resources

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The Addy Plantsite has seven mining segments that are included in this Mine Reclamation Plan. The approximate size of each mining segment is listed in the following table. Descriptions of each segment, and the reclamation work to be completed may be found in the enclosed Reclamation Permit Form SM-8A and Supplemental Information. The total vertical depth from pre-mining topographic grade will be 261 feet, which will occur in the East Pit.

Segment No.	Description	Acres
Segment 1	East Pit	39.8
Segment 2	South Landfill and Northeast Waste Rock Storage Area	16.8
Segment 3	West Pit	20.6
Segment 4A	Already reclaimed as wildlife habitat	9.2
Segment 4B	Already reclaimed as farm land	31.6
Segment 4C	Northwest Waste Rock Disposal Area	16.7
Segment 4D	Already reclaimed as wildlife habitat	3.5
Segment 5	Future Potential Waste Rock Disposal Area (Not Disturbed)	132.6
Segment 6	Fines Storage Area	13.4
Segment 7	Crushing Area and Quarry Office Area	20.1
Total acreage in mining segments		304.3
Total acreage in mining permit		433

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and plans required by the agency. You are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The Addy Plantsite is located to the west of Addy, Washington (See Figure 1 of the Mine Reclamation Plan—copy attached to the back of this checklist). The Plantsite is located in portions of Sections 11, 12, 13, and 14 in Township 33 North and Range 39 East. The street address is:

1560A Marble Valley-Basin Road
Addy, WA 99101-0115

See Figures 5, 6, and 7 of the Mine Reclamation Plan for photo-based maps—copies are attached to the back of this checklist.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (check one):

☒ Flat ☒ Steep Slopes
☐ Rolling ☐ Mountainous
☐ Hilly ☒ Other

Portions of the Plantsite are relatively flat and others have steep slopes. Figure 7 in the Mine Reclamation Plan shows expected topography following reclamation.

b. What is the steepest slope on the site (approximate percent slope)?

The steepest natural slope is between 0-65 percent. The steepest man-made slope is vertical in the quarry between benches. Also, there are some adjacent natural near vertical areas to the east of the mine site above the Colville River.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Native soils found at the quarry prior to mining were predominately a dolomite rock outcrop with minimal top soils. Other soils found nearby are loamy sands, gravelly sandy loam, and loam.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

Small slides have occurred in fills surrounding the East and West Pit caused by over-irrigation. These areas have since been revegetated and have been stable.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Segmental reclamation will be accomplished using quarrying and filling techniques as described in the Mine Reclamation Plan. Sources of fill will include Di-Cal Slag (West Pit), Shot-rock from the quarry, and topsoil materials.

f. Could erosion occur as a result of clearing, construction or use? If so, generally describe.

Mining and plant operations have ceased. Revegetation is being conducted to minimize future erosion. Some minor erosion could occur as a result of topsoil spreading prior to establishment of vegetative cover.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

No impervious surfaces will be added to the site as a result of mine reclamation.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Caution will be used while loading/unloading and transporting material to its final destination. All areas covered with topsoil material will be revegetated as described in the Mine Reclamation Plan. Storm water will be managed to promote natural infiltration through areas of established vegetation. Excess water will be directed to the areas shown on Figure 7A (a copy of Figure 7A is attached to the back of this checklist) and described in Section 1.3 of the Supplement to Form SM-8A of the Mine Reclamation Plan.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

There will be temporary emissions from heavy equipment (loaders, trucks, and graders) during material removal and placement operations. Minor dust may also be emitted during grading and contouring. Dust emissions will be minimal after revegetation.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

None.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Dust control measures such as careful handling of equipment and/or applications of water will be used to control dust emissions when necessary.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

There are no natural surface water bodies within the reclamation sites. The Addy Plantsite has several man-made wastewater lagoons. Also, the Colville River is located to the east of the reclamation areas. A pond will be constructed in the western floor area of the East Pit to promote wildlife as described in the Mine Reclamation Plan

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No, the Addy Plantsite property includes the shores of the Colville River. The east highwall of the East Pit represents the 200-foot setback boundary.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

4) Will the proposal require surface water withdrawals or diversions? Give general descriptions, purpose, and approximate quantities if known.

None.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

None.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

Reclamation will promote infiltration of precipitation into vegetated areas. The East Pit pond water level will fluctuate in response to storm water additions and seasonal hydrologic conditions and is expected to maintain equilibrium with flow through fractures associated with the underlying dolomite. The long-term operational plan for the West Pit dewatering well will be developed in coordination with the Washington State Department of Ecology.

2) Describe waste material that will be discharged into the ground from septic tanks or others sources, if any (for example: domestic sewage; industrial, containing the following chemicals. . .; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

None.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

See Item B.1.h.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Wastes that release ammonia when contacted with water are stored in the Environmental Landfill portions of the South Landfill and the West Pit. These wastes are stored above the high groundwater elevation. There is no discharge to surface water.

Ammonium nitrate is a component of the explosives used during quarrying. Small amounts of unexploded explosives are typical during quarrying and are expected to be present in the East Pit pond water, but expected to degrade over time as the water is used to irrigate areas being vegetated and any ammonium nitrate present is consumed as nutrients for reclamation vegetation.

- d. **Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:**
See Item B.1.h.

4. **Plants**

- a. **Check types of vegetation found on the site:**

Deciduous tree: ☐ alder

☐ maple

☐ aspen

☐ other

Evergreen tree: ☒ fir

☐ cedar

☒ pine

☐ other

Wet soil plants: ☐ cattail

☐ buttercup

☐ bullrush

☐ skunk cabbage

☐ other

Water plants: ☐ water lily

☐ eelgrass

☐ milfoil

☐ other

☒ Shrubs

☒ Grass

☐ Pasture

☒ Crop or Grain

☒ Other Types of Vegetation

- b. **What kind and amount of vegetation will be removed or altered?**

Revegetation of disturbed areas will be conducted as described in the Mine Reclamation Plan.

- c. **List threatened or endangered species known to be on or near the site.**

None known.

- d. **Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:**

See Section 2 of the Form SM-8A Supplement for a description of the revegetation of each segment.

5. Animals

- a. **Check any birds and animals which have been observed on or near the site or are known to be on or near the site:**

Birds: ☒ hawk
☒ heron
☒ eagle (seasonal)
☒ songbirds
☐ others:

Mammals: ☒ deer
☐ bear
☐ elk
☐ beaver
☐ others:

Fish: ☐ bass
☐ salmon
☐ trout
☐ herring
☐ shellfish
☐ others:

- b. **List any threatened or endangered species known to be on or near the site.**

None known.

- c. **Is the site part of a migration route? If so, explain.**

Hawks, eagles and waterfowl are known to migrate through this general area.

- d. **Proposed measures to preserve or enhance wildlife, if any:**

Revegetation of mining segments will provide more suitable habitat for wildlife. The East Pit will have a pond that will attract wildlife.

6. Energy and Natural Resources

- a. **What kinds of energy (electrical, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

Fuel is needed to operate loading/unloading, hauling, and grading equipment during reclamation. There will be insignificant energy needs associated with the reclamation work.

After the mining segments are reclaimed, energy needs onsite will be less than what is currently used.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

During plant operations, process materials which released ammonia when contacted with water were hydrated then hauled and deposited at the southern portion of the West Pit in the Environmental Cell. Since these materials contain some residual ammonia the bottom of the cell is above the groundwater table and surface water is directed away from the site. The reclamation will not disturb these materials.

Di-Cal slag was hauled and deposited in the West Pit. Di-Cal is an alkaline product (pH of 11.5) consisting of the following components:

- Calcium oxides, calcium hydroxides
- Magnesium oxides, magnesium hydroxides
- Calcium silicate

Di-Cal is not a hazardous waste. Handling of material is similar to handling lime.

Ammonium nitrate is a component of the explosives used during quarrying. Small amounts of residual ammonium nitrate are typical during quarrying and are expected to be used up or degrade over time. The water within the pond will be used for up to three years to establish reclamation vegetation and recover the nutrient value.

1) Describe special emergency services that might be required.

None. NW Alloys has an Emergency Response Plan for the Addy facility.

2) Proposed measures to reduce or control environmental health hazards, if any:

Personnel working on the site are required to use personal protective equipment in accordance with the provisions of the NW Alloys' Health and Safety Plan.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

- 2) **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**

Types and levels of noise created would be similar to previous industrial activities (loading/unloading, hauling, and other plant operations). Reclamation will primarily be conducted during daylight hours.

- 3) **Proposed measures to reduce or control noise impacts, if any:**

None.

8. Land and Shoreline Use

- a. **What is the current use of the site and adjacent properties?**

The site has a closed industrial facility. Adjacent properties are agricultural to the north, west, and south, and recreational/urban to the east where the Colville River and the community of Addy is located.

- b. **Has the site been used for agriculture? If so, describe.**

Much of the site has not been used for agriculture. Exceptions are Segment 4B, which has been reclaimed for subsequent use of farming and Segment 4C, which will also be reclaimed for farming. Segment 5 is currently used for farming and this use will continue because of the plant closure.

- c. **Describe any structures on the site.**

There are no structures on the reclamation portions of the site addressed in this plan, except for Segment 7, where the crusher equipment and office buildings are located. Industrial buildings and other structures are located nearby as part of the Addy Plantsite.

- d. **Will any structures be demolished? If so, what?**

Two small ponds in Segment 7 will be filled with rock and reclaimed, and the crusher plant will be removed. The other structures in Segment 7 that include the west pond, pump house, substation, fuel tanks, and buildings (047, 305, 308 and 049) will remain to support subsequent use of the adjoining plantsite property. The pump house in Segment 3, the West Pit, will remain.

- e. **What is the current zoning classification of the site?**

The site is not zoned in Stevens County.

- f. **What is the current comprehensive plan designation of the site?**

The land use designation is Resource Management II.

- g. **If applicable, what is the current shoreline master program designation of the site?**

A shorelines permit will not be necessary for the pond in the East Pit based on a phone call to Jim DeGraffenreid, Stevens County Planner, on May 29, 1998.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No.

i. Approximately how many people would reside or work in the completed project?

No one would reside in the completed project.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Not Applicable (NA)

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The reclamation activities are compatible with existing and projected land uses and plans because the reclaimed land uses will be similar to existing nearby land uses. The reclamation plan is required for the Addy Plantsite facility by the Department of Natural Resources, which addresses land use issues.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

NA

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low income housing.

NA

c. Proposed measures to reduce or control housing impacts, if any:

NA

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas what is the principal exterior building material(s) proposed?

There are no structures proposed as part of the reclamation work. However, there will be residual landforms as a result of mining and reclamation activities. The tallest height is approximately 1830 feet in the Northeast Quarry area. The following elevations are anticipated for each mining segment:

- Segment 1 (East Pit) – at existing elevation with tallest portion at approximately 1760 feet in the southwest corner.
- Segment 2 (Northeast Quarry Area) – at existing elevation of approximately 1830 feet

- Segment 3 (West Pit) – will not exceed 1830 feet in elevation
- Segment 4 (Waste Rock Disposal Area) – remain at existing elevation and lower where topsoil is removed for placement elsewhere.
- Segment 5 (Reserved Area) – remains at existing original elevation
- Segment 6 (Crushing Fines) – graded to near original topography
- Segment 7 (Crushing and Quarry Area) – graded to existing topography

b. What views in the immediate vicinity would be altered or obstructed?

Stockpiled topsoil material along the north edge of the West Pit (Segment 3) will be used for reclamation. Views may be opened up slightly as this material is used. A saddle-notch will also be created between the East Pit (Segment 1) and the West Pit (Segment 3) as described in the Mine Reclamation Plan. Neither of these activities are expected to significantly alter or block views from Highway 395, the community of Addy, nor where the general public typically notices the skyline.

c. Proposed measures to reduce or control aesthetic impacts, if any:

The mining segments (2-7) will be graded, contoured, and revegetated at closure to improve aesthetics. The slopes of Segment 1 will be "naturalized" and revegetated after the pit is closed.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

None.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

None. The Colville River is nearby but not in the immediate vicinity.

b. Would the proposed project displace any existing recreational uses? If so, describe.

No.

- c. **Proposed measures to reduce or control impacts to recreation, including recreation opportunities to be provided by the project or applicant, if any:**

The reclamation of the mining segments will provide for additional wildlife habitat that may enhance recreational activities (wildlife viewing, walking, etc.) in the nearby area.

13. Historic and Cultural Preservation

- a. **Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

None.

- b. **Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.**

NA

- c. **Proposed measures to reduce or control impacts, if any:**

NA

14. Transportation

- a. **Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

Motor vehicle traffic can enter the Addy Plantsite using either of two main plant entrances off of the Marble Valley Road near Addy, Washington.

- b. **Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

No.

- c. **How many parking spaces would the completed project have?**

How many would the project eliminate?

NA

- d. **Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

None.

- e. **Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The reclamation project will occur in the immediate vicinity of rail transportation.

- f. **How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

None.

g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

NA

16. Utilities

a. Check utilities currently available at the site:

☒ electricity

☐ natural gas

☒ water

☒ refuse service

☒ telephone

☐ sanitary sewer

☒ septic system

☐ other

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

No modifications to existing utilities are required to support the proposed project activities.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: 

Date Submitted: 06-02-04